



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,010	10/05/2001	Duane Mark Baldwin	SJ09-2001-0093	4421
46917	7590	01/25/2006	EXAMINER	
KONRAD RAYNES & VICTOR, LLP. ATTN: IBM37 315 SOUTH BEVERLY DRIVE, SUITE 210 BEVERLY HILLS, CA 90212			CHOUDHURY, AZIZUL Q	
			ART UNIT	PAPER NUMBER
			2145	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/972,010	Applicant(s) BALDWIN ET AL.	
	Examiner Azizul Choudhury	Art Unit 2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-21 and 23-26 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-21 and 23-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

This office action is in response to the correspondence received on October 24, 2005.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-21 and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bates et al (US Pat No: US006977927B1) in view of Phillips et al (US Pat No: US005321828A), hereafter referred to as Bates and Phillips, respectively.

1. With regards to claims 1, 15 and 21, Bates teaches through Phillips, a storage area network (SAN) having first and second digital data processors and one or more storage devices in communication with the digital data processors comprising:

- A manager in communication with the SAN components (Figure 7, element 104, Bates);
- A first platform-specific process executing on the first digital data processor, the first digital data processor executing under a first operating system (Figure 7, element 702, Bates);

Art Unit: 2145

- A second platform-specific process executing on the second digital data processor, the second digital data processor executing under a second operating system different from the first platform (Figure 7, element 704, Bates);
- A first common platform-independent process executing on the first digital data processor, wherein the first common platform independent process invokes and communicates with a first command line interface of the first operating system to effect execution of the first platform-specific process via one or more command-line parameters (GDB communicates with Windows through ASCII strings in a command line interface (column 23, lines 50-67, Phillips));
- A second common platform-independent process executing on the second digital data processor, wherein the second common platform independent process invokes and communicates with a second command line interface of the second operating system to effect execution of the first platform-specific process via one or more command-line parameters (GDB communicates with Windows through ASCII strings in a command line interface (column 23, lines 50-67, Phillips)); and
- The manager transmits a query to the first and second common platform-independent processes to request information regarding one or more of the SAN components and the platform independent processes invoke the first and second platform-specific processes, respectively, to obtain the requested

information (Storage allocator communicates with servers and storage to process platform-specific processes (column 13, line 29- column 14, line 60, Bates).

While Bates teaches a SAN design using different operating systems (Figure 7, Bates), multiple processors (column 3, lines 46-67, Bates) and platform-specific operations, Bates does not specifically disclose the use of a command line interface between platform-specific processes.

Phillips teaches a method by which platform-specific processes are able to communicate via a command line interface (column 23, lines 50-67, Phillips). Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Bates with those of Phillips, to provide an interface between host servers and storage (column 8, lines 52-53, Bates).

2. With regards to claim 3, Bates teaches through Phillips, the SAN, wherein each of the first and the second operating systems can be any of a Unix™, a Windows™, Solaris, AIX operating systems

(Bates' design allows for NT (Windows) and Unix (Figure 7, Bates). While Bates teaches a SAN design using different operating systems (Figure 7, Bates), multiple processors (column 3, lines 46-67, Bates) and platform-specific operations, Bates does not specifically disclose the use of a command line interface between platform-specific processes.

Phillips teaches a method by which platform-specific processes are able to communicate via a command line interface (column 23, lines 50-67, Phillips). Phillips' design also permits the use of Windows and Unix (column 23, lines 50-67, Phillips). Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Bates with those of Phillips, to provide an interface between host servers and storage (column 8, lines 52-53, Bates)).

3. With regards to claims 4, 16 and 23, Bates teaches through Phillips, the SAN, comprising a manager in communication with the first and second common platform-independent processes to transmit requests thereto for information regarding one or more components of the SAN

(Bates' design allows for the storage allocator to communicate with servers and storage to process platform-specific processes (column 13, line 29- column 14, line 60, Bates). While Bates teaches a SAN design using different operating systems (Figure 7, Bates), multiple processors (column 3, lines 46-67, Bates) and platform-specific operations, Bates does not specifically disclose the use of a command line interface between platform-specific processes.

Phillips teaches a method by which platform-specific processes are able to communicate via a command line interface (column 23, lines 50-67, Phillips). Therefore, it would have been obvious to one skilled in the art, during the time

of the invention, to have combined the teachings of Bates with those of Phillips, to provide an interface between host servers and storage (column 8, lines 52-53, Bates)).

4. With regards to claims 5 and 24, Bates teaches through Phillips, the SAN, wherein the first and second common platform independent processes respond to the requests from the manager by invoking the first and second platform-specific processes, respectively

(Bates' design allows for the storage allocator to communicate with servers and storage to process platform-specific processes (column 13, line 29- column 14, line 60, Bates). While Bates teaches a SAN design using different operating systems (Figure 7, Bates), multiple processors (column 3, lines 46-67, Bates) and platform-specific operations, Bates does not specifically disclose the use of a command line interface between platform-specific processes.

Phillips teaches a method by which platform-specific processes are able to communicate via a command line interface (column 23, lines 50-67, Phillips). Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Bates with those of Phillips, to provide an interface between host servers and storage (column 8, lines 52-53, Bates)).

Art Unit: 2145

5. With regards to claims 6 and 25, Bates teaches through Phillips, the SAN, wherein the invoked first and second platform specific processes gather information regarding one or more SAN components and transmit the information to the Standard Output/Error of their respective first and second digital data processors

(Bates' design allows for the I/O (column 3, lines 37-41, Bates). While Bates teaches a SAN design using different operating systems (Figure 7, Bates), multiple processors (column 3, lines 46-67, Bates) and platform-specific operations, Bates does not specifically disclose the use of a command line interface between platform-specific processes.

Phillips teaches a method by which platform-specific processes are able to communicate via a command line interface (column 23, lines 50-67, Phillips). Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Bates with those of Phillips, to provide an interface between host servers and storage (column 8, lines 52-53, Bates)).

6. With regards to claims 7 and 17, Bates teaches through Phillips, the SAN, wherein the first and second common platform independent processes capture information in the Standard Output/Error transmitted by the invoked first and second platform specific process

(Bates' design allows for the I/O (column 3, lines 37-41, Bates). While Bates teaches a SAN design using different operating systems (Figure 7, Bates), multiple processors (column 3, lines 46-67, Bates) and platform-specific operations, Bates does not specifically disclose the use of a command line interface between platform-specific processes.

Phillips teaches a method by which platform-specific processes are able to communicate via a command line interface (column 23, lines 50-67, Phillips). Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Bates with those of Phillips, to provide an interface between host servers and storage (column 8, lines 52-53, Bates)).

7. With regards to claim 8, Bates teaches through Phillips, the SAN, wherein the common platform independent processes transmit the captured information to the manager for further processing

(Bates' design allows for the storage allocator to communicate with servers and storage to process platform-specific processes (column 13, line 29- column 14, line 60, Bates). While Bates teaches a SAN design using different operating systems (Figure 7, Bates), multiple processors (column 3, lines 46-67, Bates) and platform-specific operations, Bates does not specifically disclose the use of a command line interface between platform-specific processes.

Phillips teaches a method by which platform-specific processes are able to communicate via a command line interface (column 23, lines 50-67, Phillips). Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Bates with those of Phillips, to provide an interface between host servers and storage (column 8, lines 52-53, Bates)).

8. With regards to claims 9, 18 and 26, Bates teaches through Phillips, the SAN, wherein the manager comprises a query engine for transmitting the requests to the first and second common platform independent processes

(Bates' design allows query languages to be processed (column 15, lines 5-22, Bates). While Bates teaches a SAN design using different operating systems (Figure 7, Bates), multiple processors (column 3, lines 46-67, Bates) and platform-specific operations, Bates does not specifically disclose the use of a command line interface between platform-specific processes.

Phillips teaches a method by which platform-specific processes are able to communicate via a command line interface (column 23, lines 50-67, Phillips). Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Bates with those of Phillips, to provide an interface between host servers and storage (column 8, lines 52-53, Bates)).

9. With regards to claims 10 and 19, Bates teaches through Phillips, the SAN, wherein the query engine comprises a registry identifying the first and second common platform independent processes and the first and second digital data processors, respectively, associated therewith

(Bates' design makes use of LUNs (equivalent to registry) (column 3, lines 25-34, Bates). While Bates teaches a SAN design using different operating systems (Figure 7, Bates), multiple processors (column 3, lines 46-67, Bates) and platform-specific operations, Bates does not specifically disclose the use of a command line interface between platform-specific processes.

Phillips teaches a method by which platform-specific processes are able to communicate via a command line interface (column 23, lines 50-67, Phillips). Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Bates with those of Phillips, to provide an interface between host servers and storage (column 8, lines 52-53, Bates)).

10. With regards to claims 11 and 20, Bates teaches through Phillips, the SAN, wherein the registry provides one or more identifiers for communicating with the first and second common platform independent processes

(Bates' design makes use of LUNs (equivalent to registry) (column 3, lines 25-34, Bates). While Bates teaches a SAN design using different operating systems (Figure 7, Bates), multiple processors (column 3, lines 46-67, Bates)

and platform-specific operations, Bates does not specifically disclose the use of a command line interface between platform-specific processes.

Phillips teaches a method by which platform-specific processes are able to communicate via a command line interface (column 23, lines 50-67, Phillips). Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Bates with those of Phillips, to provide an interface between host servers and storage (column 8, lines 52-53, Bates)).

11. With regards to claim 12, Bates teaches through Phillips, the SAN, wherein the query engine formats the request in a mark-up language format

(Bates' design makes use various languages, including mark-up languages (column 15, lines 5-22, Bates). While Bates teaches a SAN design using different operating systems (Figure 7, Bates), multiple processors (column 3, lines 46-67, Bates) and platform-specific operations, Bates does not specifically disclose the use of a command line interface between platform-specific processes.

Phillips teaches a method by which platform-specific processes are able to communicate via a command line interface (column 23, lines 50-67, Phillips). Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Bates with those of

Art Unit: 2145

Phillips, to provide an interface between host servers and storage (column 8, lines 52-53, Bates)).

12. With regards to claim 13, Bates teaches through Phillips, the SAN, wherein the mark-up language can be any of XML and HTML

(Bates' design makes use various languages, including mark-up languages (column 15, lines 5-22, Bates). While Bates teaches a SAN design using different operating systems (Figure 7, Bates), multiple processors (column 3, lines 46-67, Bates) and platform-specific operations, Bates does not specifically disclose the use of a command line interface between platform-specific processes.

Phillips teaches a method by which platform-specific processes are able to communicate via a command line interface (column 23, lines 50-67, Phillips). Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Bates with those of Phillips, to provide an interface between host servers and storage (column 8, lines 52-53, Bates)).

13. With regards to claim 14, Bates teaches through Phillips, the SAN, wherein the platform independent processes format the captured information in a mark-up language format for transmission to the manager

(Bates' design makes use various languages, including mark-up languages (column 15, lines 5-22, Bates). While Bates teaches a SAN design using different operating systems (Figure 7, Bates), multiple processors (column 3, lines 46-67, Bates) and platform-specific operations, Bates does not specifically disclose the use of a command line interface between platform-specific processes.

Phillips teaches a method by which platform-specific processes are able to communicate via a command line interface (column 23, lines 50-67, Phillips). Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Bates with those of Phillips, to provide an interface between host servers and storage (column 8, lines 52-53, Bates)).

Remarks

The amendment received on October 24, 2005 has been carefully examined but is not deemed fully persuasive. The remarks however were persuasive and a new search has been performed and a new office action has been compiled.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Azizul Choudhury whose telephone number is (571) 272-3909. The examiner can normally be reached on M-F.

Art Unit: 2145

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AC


JASON CARDONE
SUPERVISORY PATENT EXAMINER